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Ciesla et al.(10) **Pub. No.: US 2012/0235935 A1**(43) **Pub. Date: Sep. 20, 2012**(54) **USER INTERFACE SYSTEM****Publication Classification**(76) Inventors: **Craig Michael Ciesla**, Mountain View, CA (US); **Micah B Yairi**, Daily City, CA (US); **Nathaniel Mark Saal**, Palo Alto, CA (US)(51) **Int. Cl.**
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(57) **ABSTRACT**

The user interface system of the preferred embodiment includes: a layer defining a surface, a substrate supporting the layer and at least partially defining a cavity, a displacement device coupled to the cavity and adapted to expand the cavity thereby deforming a particular region of the surface, a touch sensor coupled to the substrate and adapted to sense a user touch proximate the particular region of the surface, and a display coupled to the substrate and adapted to output images to the user. The user interface system of the preferred embodiments has been specifically designed to be incorporated into an electronic device, such as the display of a mobile phone, but may be incorporated in any suitable device that interfaces with a user in both a visual and tactile manner.

